

WHAT IS CLAIMED IS:

1. A method for switching between a first IGBT power converter and a second IGBT power converter in a power converter circuit having redundant power converters, said method comprising:

selectively coupling either said first power converter or said second power converter to a controlled commutating current path that is coupled to a load; and

disconnecting that one of said first power converter or said second power converter selectively coupled to said controlled commutating current path.

2. The method of claim 1, wherein said selectively coupling is accomplished by a pair of contacts between said output of each of said first power converter and said second power converters.

3. The method of claim 1, wherein only said first power converter or only said second power converter is coupled to said controlled commutating current path at a given time.

4. The method of claim 1, wherein said selectively coupling is accomplished by two separate contactors.

5. The method of claim 1, wherein said selectively coupling is accomplished by a single multi-pole contactor.

6. The method of claim 5, wherein said single multi-pole contactor is a break-before-make type contactor.

7. The method of claim 1, further comprising coupling a battery to an input of said first power converter and said second power converter using diodes.

8. The method of claim 1, wherein said controlled commutating current path comprises a power semiconductor.

9. The method of claim 1, wherein said power semiconductor is a silicon controlled rectified (SCR) or other power semiconductor device.

10. The method of claim 1, wherein said controlled commutating current path comprises a diode in series with a power semiconductor.

11. A transfer circuit topology comprising:

a first contactor having an input selectively coupled to a first power converter;

a second contactor having an input selectively coupled to a second power converter; and

a controlled commutating current path coupled to an output of said first contactor and said second contactor and to a load for providing an uninterrupted load current to said load during a transfer between said first and said second power converters.

12. The transfer circuit topology of claim 11, wherein said first and said second contactors comprise a pair of contactors.

13. The transfer circuit topology of claim 11, wherein said first contactor and said second contactor are separate contactors.

14. The transfer circuit topology of claim 11, wherein said first contactor and said second contactor comprise a single multi-pole contactor.

15. The transfer circuit topology of claim 14, wherein said single multi-pole contactor comprises a break-before-make type contactor.

16. The transfer circuit topology of claim 11, further comprising a battery coupled to an input of said first power converter and said second power converter using diodes.